5-2018

ADVANCE CARE PLANNING: CARDIOPULMONARY RESUSCITATION EDUCATION AND THE VETERAN POPULATION

Rhian Elizabeth Dalgord
Northern Michigan University, rhsmith@nmu.edu

ADVANCE CARE PLANNING: CARDIOPULMONARY RESUSCITATION EDUCATION AND THE VETERAN POPULATION

By

Rhian Elizabeth Dalgord

SCHOLARLY PROJECT

Submitted to
Northern Michigan University
In partial fulfillment of the requirements
For the degree of

DOCTOR OF NURSING PRACTICE

School of Nursing

May 2018

SIGNATURE APPROVAL FORM

ADVANCE CARE PLANNING: CARDIOPULMONARY RESUSCITATION EDUCATION AND THE VETERAN POPULATION

This DNP Scholarly Project by Rhian Dalgord is recommended for approval by the student's Faculty Chair, Committee and Department Head in the School of Nursing

Dr. Anne Stein	5/14/2018
Committee Chair: Dr. Anne Stein, PhD, FNP-BC, COHN-S	Date
Dr. Melissa Romero	5/14/2018
First Reader: Dr. Melissa Romero, PhD, FNP-BC	Date
Nancy Mass	5/14/2018
Second Reader: Nancy Maas, MSN, FNP-BC, CNE	Date
Dr. Kristi Robinia	5/14/2018
Department Head: Dr. Kristi Robinia, PhD, RN	Date

ABSTRACT

ADVANCE CARE PLANNING: CARDIOPULMONARY RESUSCITATION EDUCATION AND THE VETERAN POPULATION

By

Rhian Elizabeth Dalgord

Cardiopulmonary resuscitation educational tools are prevalent in the realm of advance care planning and shared decision making. However, tools developed specifically in the interest of veterans are lacking. This deficit impedes the advance care planning process. Easy-to-use advance care planning tools that meet specific population needs can result in a threefold higher rate of usage. The purpose of this DNP scholarly project was to evaluate the use of the Honoring Healthcare Choices CPR educational handout through administration of the iDECIDE CPR Decision Aid Acceptability questionnaire to veterans (N=70) residing in a veterans nursing home in the Midwest. The iDECIDE CPR Decision Aid Acceptability questionnaire was adapted for use in this scholarly project; it has proven to be both a valid and reliable tool in previous studies where it was used to assess CPR educational tools. The majority of study participants felt that the Honoring Healthcare Choices cardiopulmonary resuscitation handout met the needs of the veteran population. Additionally, the collection of demographic data was interpreted through Fisher's exact test of independence; however, no findings of statistical significance were yielded due to the small sample size (N=70). Future studies are needed to acknowledge if any specific demographic trends exist within this population's response to the Honoring Healthcare Choices CPR educational handout and to shape future educational tools.

DEDICATION

This scholarly project is dedicated to my father, Raymond Smith. Thank you for modeling and teaching me that every life experience is an opportunity for growth and love.

ACKNOWLEDGEMENTS

The author wishes to thank committee members Dr. Anne Stein, Dr. Melissa Romero and Nancy Mass with additional acknowledgment to Dr. Lawrence Skendzel, Kristina Lynch, Kate LaBeau and Shannon Scott. Thank you for your support, time and guidance during this process.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

Chapter One

Introduction to the Problem

The U.S. Department of Veterans Affairs charged itself with reshaping the care provided to veterans through a detailed 10 part strategic initiative plan found in the "Blueprint for Excellence" put forth in 2014 (U.S. Department of Veterans Affairs, 2014). The overall goal of the "Blueprint for Excellence" is to ensure that all services are "veteran-centric" as opposed to "provider-centric" further shifting away from the traditional medical model (U.S. Department of Veterans Affairs, 2014). The Institute of Medicine (IOM, 2015) shares that the use of advance care planning (ACP) upholds a valuable means to achieve patient-centered and value-based medical care. Studies geared toward ACP for veterans are lacking with a specific void noted among rural veterans, representing an underserved research population (Mahaney-Price et al., 2014).

Communication regarding ACP with a specific focus on cardiopulmonary resuscitation (CPR) is a daunting and uncomfortable topic for many healthcare professionals (Au et al., 2012; Mahaney-Price et al., 2014; Pearlman, Starks, Cain, & Cole, 2005). Lack of educational training in the realm of shared decision making inhibits ACP across healthcare education (Au et al., 2012). The use of well-developed educational decision making tools are a necessity in facilitating ACP and shared decision making (Wright et al., 2008).

Medical costs during the last year of life are disproportionate when compared to the entire life span, with costs increasing dramatically during the final month of life (Hogan, Lunney, Gabel, & Lynn, 2001). Using educational decision tools to promote and discuss ACP is directly linked to less aggressive care, better patient outcomes during the

end of life stages, and increased patient and family satisfaction (Wright et al., 2008). If a physician fails to discuss ACP with a patient, there is often a lack of understanding regarding patient preferences (Downey, Au, Curtis, & Engelberg, 2013).

The U.S. Department of Veterans Affairs (2017) defines ACP as, "a process of clarifying your values and health care choices for use at a future time if you are no longer able to make those decisions for yourself" (What is Advance Care Planning section, para. 1). Common factors considered during the ACP process include overall quality of life, prognosis, and potential complications associated with life sustaining treatments such as CPR (Pearlman et al., 2005). Numerous barriers impede the ACP process, including societal stigma and lack of time to commit to the conversation (Pearlman et al., 2005).

Assessing and developing interventions, such as educational decision tools, improves communication regarding ACP (Au et al., 2012). Adoption of these tools allows implementation of patient wishes, ultimately leading to improved patient and family satisfaction and a reduction in the intensity and cost of end of life care (Au et al., 2012). Further, the use of educational decision tools among veterans increases awareness, health literacy and contemplation regarding the value of ACP (Mahaney-Price et al., 2014). ACP tools that are easy-to-use and meet the needs of a specific population show a return in increased usage and accurate documentation of patients values and wishes (R. L. Sudore et al., 2017; R. L. Sudore & Fried, 2010).

Educational patient decision aids are used during the ACP process to facilitate shared decision making (Gibson et al., 2017). In the shared decision making process, the provider and patient develop a partnership to facilitate an active discussion including patient education along with available treatment options and associated side effects

(Gibson et al., 2017). The provider and patient work together to weigh potential options against patient-specific values to determine a treatment course and associated interventions (Charles, Whelan, & Gafni, 1999). The use of effective educational decision aids in the shared decision making process improves patient understanding of risks associated with possible treatments (Stacey et al., 2017).

A commonality among veterans is their desire for active involvement in health care decisions and, in turn, the shared decision making process (Rodríguez et al., 2013). In juxtaposition to this, health literacy is found to be lower among the veteran population (Rodríguez et al., 2013). This increases the need to properly assess educational decision tools that meet the needs of this specific population (Rodríguez et al., 2013). Shared decision making is directly impacted by the usability and value of an educational decision tool (Rodríguez et al., 2013). Developing and accessing tools to meet the specific needs of veterans, will result in a more informed shared decision making process. The purpose of this DNP scholarly project was to evaluate the use of the Honoring Healthcare Choices CPR educational handout through administration of the iDECIDE CPR Decision Aid Acceptability questionnaire at a veteran's home in the Midwest.

As veterans work through the ACP process via shared decision making, the incorporation of effective educational decision aid(s) represents a cornerstone to effective implementation. Using effective CPR education tools provides the veteran with foundational knowledge and further provides opportunity to discuss with the provider their values, wishes and goals for the remainder of their lifespan (Fischer, Tulsky, Rose, Siminoff, & Arnold, 1988). Common misconceptions exist among the general population regarding survival rates associated with CPR. Some studies conducted at veteran

facilities indicate that up to 70% of individuals believe they will survive CPR and be discharged home after the event (Fischer et al., 1988). Interventions that can be woven into routine care and that do not require additional family participation present better outcomes and increased practicality into numerous patient settings (Au et al., 2012). The implementation of CPR educational tools shows a direct increase in patient knowledge (Yamada, Galecki, Goold, & Hogikyan, 1999). Something as simple as a well-constructed handout for sharing educational information positively affects the ACP process (Yamada et al., 1999). Further, to continue to provide care that is unique and specific to this vulnerable population, it is valuable to establish the knowledge level and specific trends found among this population. This scholarly project will directly fill a gap in the published literature while aligning with both goals of the U.S. Department of Veterans Affairs and IOM (IOM, 2015; U.S. Department of Veterans Affairs, 2014).

Application of a Theoretical Framework

The focus of this scholarly project is to evaluate and provide further recommendations for the Honoring Healthcare Choices CPR educational handout used by a nursing home for veterans. The Ottawa decision support framework uses a three-step process to aid patients in making health related decisions (Ottawa Hospital Research Institute, 2017). This middle range theory has been used in the development of over 30 patient educational decision aids and provides an evidence-based and practical approach in making end of life decisions (Ottawa Hospital Research Institute, 2017). This theoretical foundation has been used in the development of evaluation tools to assess decision aids and associated educational tools, such as the iDECIDE CPR Decision Aid Acceptability questionnaire, which was adapted with permission for this scholarly project

(Frank, Pichora, Suurdt, & Heyland, 2010; Ottawa Hospital Research Institute, 2017). This framework consists of three interrelated components including: decisional needs, decision quality and decision support (Ottawa Hospital Research Institute, 2017) (See Figure 1).

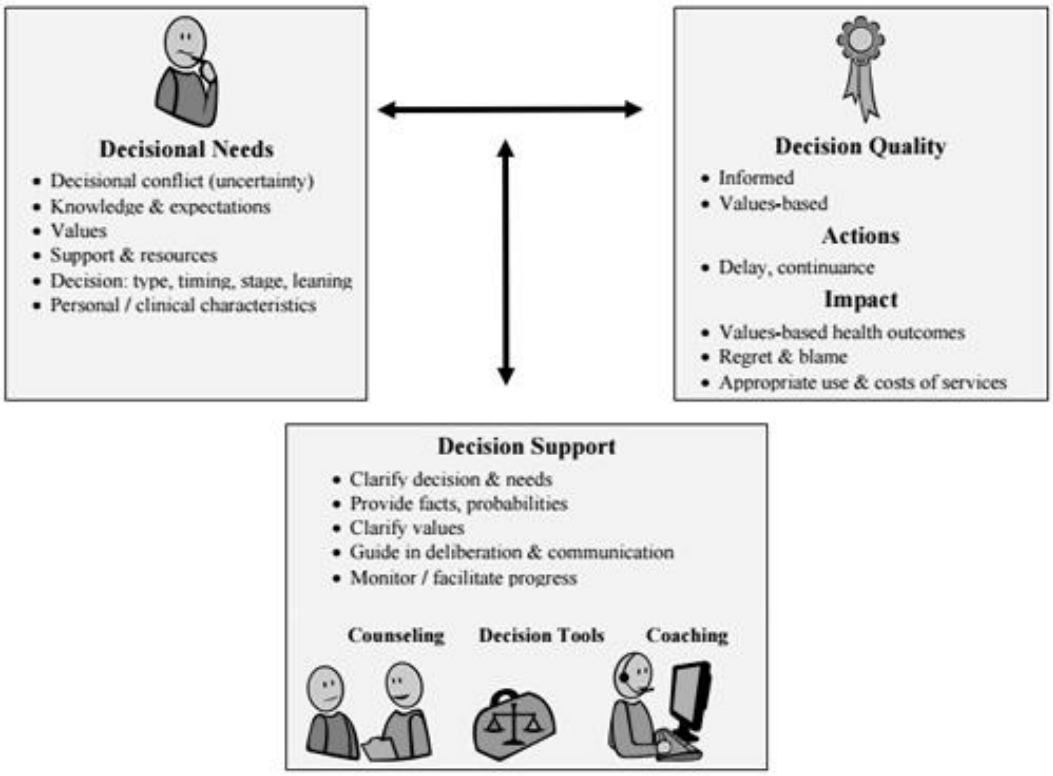

Figure 1. Ottawa decision support framework. Reprinted from *Ottawa Decision Support Framework to Address Decisional Conflict* (p. 1), by A. M. O'Connor, 2006. Copyright 2006 by Ottawa Hospital Research Institute. Reprinted with permission (Appendix A)

Frank et al. (2010), developers of the iDECIDE CPR Decision Aid Acceptability questionnaire, applied the Ottawa decision support framework when evaluating a CPR decision aid educational tool for hospitalized patients. This same framework was applied to evaluate quality and provide recommendations for the Honoring Healthcare Choices CPR educational handout.

Significance to the Population

Patient-centered care stands at the foundation of the United States Department of Veterans Affairs with ACP representing a key component of maintaining both patient autonomy and end-of-life care wishes (Au et al., 2012; U.S. Department of Veterans Affairs, 2014). Providing appropriate and effective educational decision tools and opportunities to discuss patient values, beliefs, and treatment preferences results in increased satisfaction from both the patient and family (Detering, Hancock, Reade, & Silvester, 2010). Assessing the quality of an educational decision tool and its ability to meet population-specific needs is warranted and necessary (Fallowfield et al., 2002). This will facilitate care that is both meaningful and fulfilling to the veteran population (Au et al., 2012). High quality educational decision tools help maintain both patient autonomy and satisfaction while meeting goals outlined by the U.S. Department of Veterans Affairs and IOM (Au et al., 2012; IOM, 2015; U.S. Department of Veterans Affairs, 2014).

Chapter Two

Veterans and Advance Care Planning

The mission statement of the United States Department of Veterans Affairs is to, "care for him who shall have borne the battle" (U.S. Department of Veterans Affairs, 2015, Mission Statement section, para. 1). To meet the specific and distinctive healthcare needs of this population, care must be geared toward recognizing their unique health risks based upon their service exposures and associated outcomes (U.S. Department of Veterans Affairs, 2014). When compared to the general population, the veteran population presents with significantly greater morbidity (U.S. Department of Veterans Affairs, 2014). Coupled with veteran's unique mental-health needs, there is an obligation to regularly assess the effectiveness of provided services, and perhaps, most importantly, ACP.

The U.S. Department of Veterans Affairs (2017) defines ACP as, "a process of clarifying your values and health care choices for use at a future time if you are no longer able to make decisions for yourself" (What is Advance Care Planning section, para. 1). This organization recently charged itself with reshaping the care provided through strategic initiatives found in the "Blueprint for Excellence" (U.S. Department of Veterans Affairs, 2014). The overall goal of the "Blueprint for Excellence" is to ensure services are "veteran-centric" as opposed to "provider-centric" with a shift away from the traditional medical model (U.S. Department of Veterans Affairs, 2014).

A total of 10 strategies are shared within the "Blueprint for Excellence" that aim to guide agencies in the process of achievement (U.S. Department of Veterans Affairs,

2014). Several of these approaches coincide with the research questions of this DNP scholarly project and are expanded upon below.

Strategy one: "Operate a health care network that anticipates and meets the unique needs of enrolled Veterans, in general, and the service disabled and most vulnerable Veterans, in particular", is achieved in part by the planning and design of healthcare based on demographic data (U.S. Department of Veterans Affairs, 2014, p. 2). This highlights the ongoing value of seeking demographic trends to develop educational decision support tools that further enhance population specific needs.

Strategy three: "leverage information technologies, analytics, and models of health care delivery to optimize individual and population health outcomes", is geared towards tailoring healthcare information and resources, specifically those focused on long-term goals, to meet specific veteran needs (U.S. Department of Veterans Affairs, 2014, p. 2). Clarifying ACP content and refining this specific educational decision aid directly coincide with this strategy.

Strategy six: "advance health care that is personalized, proactive, and patient-driven, and engages and inspires Veterans to their highest possible level of health and well-being", perhaps represents the strongest correlation with this scholarly project (U.S. Department of Veterans Affairs, 2014, p. 2). The process of evaluating educational decision tools combined with gathering of demographic data, allows for the continuous development of tools that best fit the unique needs of this population (U.S. Department of Veterans Affairs, 2014). Ultimately, this provides opportunities for patient-provider conversation that further enhance the development of a trusting relationship (U.S. Department of Veterans Affairs, 2014).

A study conducted by Mahaney-Price et al. (2014) included 201 rural Alabama veterans and aimed to address the need and desires for veterans who are seeking and requiring assistance with ACP. Only 13% of study participants had a completed living will and over 40% expressed desire to have assistance in the ACP process (Mahaney-Price et al., 2014). Further, this study highlighted demographic correlations found among veterans including ethnicity and educational level (Mahaney-Price et al., 2014). White veterans were more likely to have a living will when compared to African American veterans (Mahaney-Price et al., 2014). Obtainment of a high school education or beyond reflected an increased desire to have assistance with ACP (Mahaney-Price et al., 2014). The lack of ACP along with the expressed desire to completed living wills extends the value of this scholarly project.

Initiating communication regarding ACP can be overwhelming for both provider and patient. The use of ACP tools to both begin, and, supplement the conversation have proven to be beneficial (R. Sudore et al., 2015). However, validated tools that meet the needs of veterans in the ACP process are lacking (R. Sudore et al., 2015). Efficacious tools must not exceed the fifth grade reading level and multiple conversations between provider and patient must occur to adequately discuss the full range of ACP topics (R. Sudore et al., 2015).

R. L. Sudore et al. (2017) completed a study involving 414 veterans and the use of PREPARE, an interactive ACP website. When compared with the control arm, a notable 25%-35% increase in ACP occurred when implementing the support from the website (R. L. Sudore et al. 2017). Another study, which included 92 clinicians and 376 veterans, found extreme value in supplemental educational forms when discussing ACP

topics (Au et al., 2012). The use of a supplemental ACP tool as opposed to discussion alone resulted in a threefold higher occurrence of conversation and a significant increase in patient satisfaction (Au et al., 2012). Additionally, a block-randomized controlled study was conducted at a Veteran Affairs healthcare system involving 132 participants (Pearlman et al., 2005). This study centered around the "Your Life, Your Choices" ACP workbook (Pearlman et al., 2005). The use of an ACP tool increased conversation occurrence by 34% and documentation rates by 23% (Pearlman et al., 2005). This further reinforces the importance to develop and use educational decision aids that are based on specific demographic needs.

Veterans and Shared Decision Making

Varying degrees of illness exist among the veteran population, especially those residing in long-term care facilities, and it is therefore difficult to determine a universally opportune time to discuss ACP and CPR. Patient decision and educational aids can be used to facilitate shared decision making across the lifespan (Gibson et al., 2017). In shared decision making, veterans and providers have an active discussion in which the provider uses tools, such as educational pamphlets, to facilitate a discussion regarding treatment options, risks, and benefits while taking into consideration the goals and values of the veteran (Gibson et al., 2017). An electronic portal entitled Veterans Like Me, implements shared decision making through the usage of electronic health records and provides a side-by-side comparison of comorbidities (Gibson et al., 2017). Clients can use a "point and click" modality to see a comparison of specific medical choices with those who are of similar medical conditions (Gibson et al., 2017). This visual and active program further facilitates the shared decision making process (Gibson et al., 2017). In

studies looking at the use of shared decision making aids among veterans, commonly asked questions are related to their specific health situations; emphasizing the value of a shared decision making aid used to *supplement* a conversation with a provider, rather than *replace* the role of the provider (Gibson et al., 2017). When providers are physically present and involved in discussions about patients' preferences for end-of-life treatment, there is a decreased likelihood of unwanted treatment and escalating healthcare costs (Downey et al., 2013).

A study conducted by Rodriguez et al. (2013) which included 502 veterans assessed health literacy levels and their correlation with shared decision making. A total of 51% of veterans felt a passive level of shared decision making, with 34% and 15% indicating a collaborative or active level of shared decision making with their physician, respectively (Rodríguez et al., 2013). A total of 54% of participants desired a collaborative relationship with their physician in regards to medical decisions (Rodríguez et al., 2013). Further, 55% of veterans involved in this study represented either low or marginal health literacy (Rodríguez et al., 2013). Lower health literacy directly correlated with a decreased likelihood of involvement in shared decision making further indicating the need to develop well designed and tested educational materials that directly meet the specific needs of veterans (Rodríguez et al., 2013).

Etingen, Miskevics and LaVela (2016) conducted a study involving 5,512 veterans who assessed patient centered care and health care quality with a component directly analyzing shared decision making. A distinct correlation between effectiveness of provider communication/patient involvement in shared decision making and the patients' ability to feel they were able to effectively manage their health was made

(Etingen et al., 2016). Consideration of patient preferences and experiences, such as military service, displays provider empathy and better patient satisfaction (Etingen et al., 2016). Shared decision making is a key component of patient centered care and aligns directly with the aim of the U.S. Department of Veteran Affairs, "Blueprint for Excellence" (Etingen et al., 2016; U.S. Department of Veterans Affairs, 2014).

Veterans and Cardiopulmonary Resuscitation Education

ACP consists of multiple facets, with proper patient education representing a critical component (Downey et al., 2013). Failure to properly educate veterans regarding the potential side effects and associated outcomes from CPR is detrimental to ACP (Fischer et al., 1988; Yamada et al., 1999). Missteps in the patient education process frequently lead to provider assumptions and misconceptions regarding patient preferences (Downey et al., 2013; Fischer et al., 1988). One-time conversations about ACP and the omission of effective education tools leads to a failure in the planning process and outcomes that do not agree with patient wishes and values (Downey et al., 2013; Menon, Campbell, Ruskin, & Hebel, 2000).

A study conducted by Yamada et al. (1999) consisted of multiple components regarding advance directives and CPR educational tools. The study involved 117 veterans in which the experimental group received an additional CPR educational handout regarding procedural aspects and associated outcomes (Yamada et al., 1999). Prior to receiving the educational handout, only 15% of participants correctly estimated the survival likelihood post CPR intervention (Yamada et al., 1999). Additionally, only 38.9% of experimental group participants could identify what CPR consisted of and 35.7% had correct knowledge regarding outcomes related to CPR (Yamada et al., 1999).

Post-intervention numbers increased to 78.1% and 62.9% respectively (Yamada et al., 1999). This study further highlights the specific void in veterans' understanding of both CPR and its associated outcomes (Yamada et al., 1999). Although this study is dated, a lack of recent research highlights the need for additional studies.

Downey et al. (2013) conducted a study involving 196 male veterans assessed provider's accuracy in understanding patient preferences regarding life-sustaining treatments such as CPR. It was revealed that only 15% of participants had taken part in prior discussions regarding end-of-life care preferences (Downey et al., 2013). However, 70% of providers felt that they probably or definitely knew a patient's preference regarding end-of-life services such as CPR (Downey et al., 2013). Further, clinicians made more mistakes when patient preferences were geared towards less aggressive treatments (Downey et al., 2013). When a provider has awareness of patient preferences then they have an increased likelihood to negate unwanted treatments (Downey et al., 2013). The findings of this study further highlight the value in shared-decision making and end-of-life treatment education that specifically highlights risks associated with treatment preferences (Downey et al., 2013).

Numerous factors can influence an individual's decision regarding CPR status, necessitating the need to revisit this topic on a recurrent basis (Downey et al., 2013; Menon et al., 2000). Revisiting these conversations, especially as a patient ages, is imperative (Downey et al., 2013). Although decisions regarding CPR treatment showed no correlation between the patient's perceptions of their current health status, a degree of tentativeness was noted among older individuals regarding the certainty of their end-of-life preferences (Downey et al., 2013). A study conducted by Menon et al. (2000)

included 295 veterans, assessed a correlation between depression and hopelessness in regards to choices about CPR status. Findings indicated that those currently experiencing high levels of hopelessness were five times more likely to refuse CPR during an acute hospitalization (Menon et al., 2000). Increasing conversations with explicit documentation regarding patient preferences is critical to ACP among veterans (Downey et al., 2013).

To meet the healthcare needs of the veteran population, care must be geared toward recognizing their unique health risks based upon their service exposures and associated outcomes (U.S. Department of Veterans Affairs, 2014). The "Blueprint for Excellence" outlined specific strategies to further aid in the development of ACP and educational decision tools used in the shared decision making process (U.S. Department of Veterans Affairs, 2014). Review of the literature showed a void in research regarding ACP and shared decision making process despite a desire from veterans to participate in this level of care. These components coupled with missteps in the CPR education process aligned directly with the purpose of this scholarly project. Based on the review of literature, the research questions for this scholarly project include (a) using the iDECIDE survey, does Honoring Healthcare Choices CPR educational handout meet the needs of the veteran population? (b) are there any demographic trends in relation to responses on the iDECIDE survey?

Ottawa Decision Support Framework-Theoretical Model

Patient education and the associated educational tools/decisional aids are continually developed and provided to individuals during numerous healthcare encounters. Educational decision aids come in several formats and presentation styles

including handouts, videos, computer aided programming and face-to-face conversations. The use of the Ottawa decision support framework provides a theoretical foundation to ensure that educational decision aids are developed and evaluated in an evidence-based format (Ottawa Hospital Research Institute, 2017). This framework has been used in the development and evaluation of over 30 patient decisional support tools (Ottawa Hospital Research Institute, 2017).

The Ottawa decision support framework is a pertinent theoretical model for this scholarly project as the model focuses on specific decisional needs and quality when evaluating a decisional support tool (Ottawa Hospital Research Institute, 2017). Implementation of educational decision support tools for end of life decisions, such as CPR, are lacking among the veteran population (Downey et al., 2013). Goals shared by the U.S. Department of Veterans Affairs to ensure services are "veteran-centric" as opposed to "provider-centric" highlight the need for the evaluation of educational tools to best meet the specific needs of veterans during ACP and shared decision making conversations (U.S. Department of Veterans Affairs, 2014). The use of the adapted iDECIDE CPR Decision Aid Acceptability questionnaire to evaluate the Honoring Healthcare Choices CPR educational handout will assist in the development of a tool that takes into account the specific needs of veterans. This will facilitate the ACP conversation, and shared decision-making process.

The Ottawa decision support framework shows the interconnection of three concepts, including: *decisional needs, decision quality* and *decisional support* (Ottawa Hospital Research Institute, 2017). Failure to recognize *decisional needs* directly impacts *decision quality* and thus impacts the value of available *decisional support* (Ottawa

Hospital Research Institute, 2017). The use of this framework will be used to guide the evaluation of the Honoring Healthcare Choices CPR educational handout (Appendix B).

The model begins with taking into account the decisional needs of the user, which in this scholarly project would be the veteran (Ottawa Hospital Research Institute, 2017). This area includes the consideration of decisional conflict or a degree of uncertainty regarding an action to take, knowledge & expectations, values, support & resources of the user (Ottawa Hospital Research Institute, 2017). It further includes components about the decision including the learning stage, type of decision, and timeframe in which the decision needs to be made (Ottawa Hospital Research Institute, 2017). Finally, personal characteristics, including common demographic information are addressed (Ottawa Hospital Research Institute, 2017). The adapted iDECIDE CPR Decision Aid Acceptability questionnaire presents the veteran with evaluation questions determining the tool's ability to address the decisional needs of the user (Frank et al., 2010).

Decisional conflict is addressed in questions regarding the veteran's perception of how helpful the educational handout was (see Appendix C: Question 6), and the likelihood to recommend the handout to others (see Appendix C: Question 7)(Frank et al., 2010). Knowledge gained from the handout is addressed in questions assessing the handout's ability to clearly share why CPR may occur (see Appendix C: Question 9), what CPR consists of (see Appendix C: Question 10), along with survival likelihood (see Appendix C: Question 11), and potential side effects (see Appendix C: Question 12) (Frank et al., 2010). The probability of outcomes or expectations is addressed in questions assessing the amount and clarity of information in the handout (see Appendix C: Question 5) in addition to an overall rating (see Appendix C: Question 8)(Frank et al.,

2010). Qualitative questions including the influence of military service on decisions and the handout's ability to meet the needs of veterans correlate with the values section found under the decisional needs section (see Appendix C: Questions 13 and 15) (Frank et al., 2010). Availability of support is addressed in the surveys questioning if a family member or friend is also reading the educational handout (see Appendix C: Question 2)(Frank et al., 2010). The distribution of an associated demographic survey including the components of age, gender, ethnicity, education, religion and several questions specifically questioning military history were used to further highlight any trends that can be applied to the personal characteristics section (See Appendix D).

The model then progresses into decisional quality of the educational decision aid. One of the most vital components in assessing decisional quality is the handout's ability to aid the user in making informed and value-based choices. Once again, the adapted iDECIDE CPR Decision Aid Acceptability questionnaire presents the veterans with numerous assessment questions determining the handout's ability to aid in making informed and value-based choices (Frank et al., 2010). Questions assessing the quality of the decision aid to assist in making informed decisions include rating the amount (see Appendix C: Question 3), clarity and helpfulness of the presented information (Frank et al., 2010). Further, quality was assessed in an overall rating of the document and knowledge assessment questions including: why CPR would occur, what CPR is, survival rate, and potential side effects (Frank et al., 2010). The decisional quality of the CPR educational handout in relation to values was assessed via qualitative questions assessing the relationship of military experiences and CPR education. Per the theoretical framework, decisional quality is also determined via the action taken by the user (Ottawa

Hospital Research Institute, 2017). Questions regarding an overall rating and degree of helpfulness of the handout aid in determining how beneficial the handout is in assisting the user in taking action regarding medical decisions (Frank et al., 2010; Ottawa Hospital Research Institute, 2017). The final component of decisional quality assesses the impact of the educational decision handout (Ottawa Hospital Research Institute, 2017). Impact is directly correlated with the aforementioned items and in relationship to an individual's decisional needs (Ottawa Hospital Research Institute, 2017). Potential polarization of the educational handout's presentation is assessed in the questionnaire's ability to present balanced and unbiased information (see Appendix C: Question 4) (Frank et al., 2010). Further, a financial component relates to the overall impact of an educational tool (Ottawa Hospital Research Institute, 2017). CPR educational handouts have proven to be a cost effective measure when discussing this ACP topic. These cost savings allow for better utilization of resources for individuals, institutions and the greater community.

The final component of the Ottawa decision support framework assesses decision support and can used to assess a decisional tool in its entirety (Ottawa Hospital Research Institute, 2017). The decisional support component embraces the educational tool's ability to identify decisional needs and quality, while providing factual information as discussed above (Ottawa Hospital Research Institute, 2017). Decisional support also consists of clarifying values to guide personal communication and deliberation with the healthcare provider (Ottawa Hospital Research Institute, 2017). Finally, the decision support component monitors and facilitate progress towards a patient defined goal. An additional demographic survey of age, gender, ethnicity, education, religion and several questions regarding military history was also used.

Implementing the Ottawa decision support framework to assess the Honoring Healthcare Choices CPR educational handout is both an evidence-based and practical approach (Ottawa Hospital Research Institute, 2017). This framework has been used in the development and evaluation of over 30 patient educational decision support tools (Ottawa Hospital Research Institute, 2017). Educational tools evaluated by this framework consistently show an improvement in overall knowledge, reduction in decisional conflict, and aid individuals reaching decisions that are congruent with their personal values (Ottawa Hospital Research Institute, 2017). The use of this theoretical framework underscores the value of the three interrelated components including: decisional needs, decision quality and decision support This framework aids in the development of an effective and evidence-based educational decision support tool (Ottawa Hospital Research Institute, 2017).

Chapter Three

Purpose and Sample

The purpose of this DNP scholarly project was to evaluate the use of the Honoring Healthcare Choices CPR educational handout through administration of the iDECIDE CPR Decision Aid Acceptability questionnaire at a veteran's home in the Midwest. The U.S. Department of Veterans Affairs delineates a clear mission that directly aligns with improving healthcare's ability to meet the values and needs of this vulnerable population (U.S. Department of Veterans Affairs, 2015). A questionnaire assessing the educational quality of a CPR handout was used for evaluation. The evaluation process allowed the opportunity to provide quality resources on this topic to the veteran population. Additionally, the collection of demographic data allowed identification of trends that are specific to the unique life experiences of the veteran population. Through the betterment of an ACP educational tool, specific needs of veterans were recognized, assessed, and considered. This process ensures that fulfilling and meaningful care is provided to individuals in veteran facilities now and in the future (U.S. Department of Veterans Affairs, 2015).

Inclusion criteria consisted of being 18 years of age or older, prior military experience, current residence at a nursing home for veterans and the cognitive ability to complete the delineated tasks with only physical assistance required by the student investigator. Assistance in reading and completing the surveys, due to physical limitations, was provided solely by the student investigator for consistency in data collection. A total of 172 veterans resided at a nursing home for veterans during the data collection period. Initially, 25 veterans were excluded due to their residence in the

facility's memory care unit and the inability to cognitively complete the survey independently. The total sample size was determined to be 147. A sample size calculator was used with a confidence level of 95% with a 5% margin of error. A minimum sample size of 107 for convenience sampling was determined for this scholarly project. However, only 70 subjects met the requirements to participant in the study.

Scholarly Project Approval

In March of 2017, Institutional Review Board (IRB) administrative approval was obtained from the researcher's university (Appendix E). Prior to submitting for IRB approval, permissions were obtained regarding the usage of Honoring Healthcare Choices CPR educational handout (Appendix F). Further, permissions to adapt the iDECIDE CPR Decision Aid Acceptability questionnaire were obtained from Dr. Daren Heyland, lead provider at CARENET, Canadian Researchers at the End of Life Network (Appendix G). Written approval was received from a nursing home for veterans stating the university IRB fulfilled any and all necessary research standards held by the facility (Appendix H).

Design and Measures

The research design employed for this scholarly project was a correlational, mixed methods with embedded design and concurrent timing (Terry, 2015). Immediately after participant review of the Honoring Healthcare Choices CPR education, the adapted iDECIDE CPR Decision Aid Acceptability questionnaire was administered (Appendices C and F).

The original iDECIDE CPR Decision Aid Acceptability questionnaire has been used in numerous studies regarding decision-making aid on the topic of CPR (Frank et

al., 2010). Development of the original questionnaire was based upon evidence, focus groups, previous research and expert opinion (Frank et al., 2010). The original questionnaire was developed for use with an educational video tool. With permissions revisions were made and word "video" was replaced with the word "handout". The questionnaire was used to evaluate the Honoring Healthcare Choices CPR educational handout as opposed to an educational video. After undergoing psychometric evaluation, the survey was found to be both reliable and valid (Frank et al., 2010).

The iDECIDE CPR Decision Aid Acceptability questionnaire consisted of 12 questions. Question one asked if the participant read the entire educational handout. The second question asked the participant if anyone else read the educational handout. Question three asked about the amount of information in the educational handout, with the optimal response defined as, "about the right amount". The fourth question addressed how balanced the participant felt that the handout presented the information, with the optimal response defined as, "balanced". Question five asked the participant how clear the information was in the educational handout. Optimal responses were defined as, "everything was clear" and "most things were clear". The sixth question addressed how helpful the educational handout was in helping make decisions about CPR, with optimal responses defined as "very helpful" and "somewhat helpful". Question seven addressed how likely the participant would be to recommend this educational handout to others. The optimal responses were defined as "definitely recommend" and "probably recommend".

Questions 8-12 used the same 5-point Likert scale with options ranging from poor, fair, good, very good and excellent for each question. Optimal responses were

defined as excellent, very good or good. Question eight asked the participant to provide an overall rating of the educational handout. The ninth question asked how well the educational handout addressed why CPR would occur. Question 10 asked the participant how well the educational handout addressed what CPR is. Question 11 asked how well the educational handout addressed survival from CPR. The 12th and final Likert survey question asked how well the educational handout addressed potential side effects from CPR.

Three qualitative questions were developed by the student researcher to provide participants with an opportunity to give personal insight in regards to the topic and further illuminate the collected data. Question 13 asked, "Do you feel your experiences in military service influence your decision to choose/not choose CPR? Please explain." Question 14 was stated as follows, "Based on your experience reading the educational handout, what suggestions do you have to improve the handout?" The final qualitative question, question 15, was stated as follows, "Based on your experience reading the educational handout, do you feel it meets the needs of the veteran population?" Next, an associated demographic data survey was anonymously collected. Demographic data gathered included the following: (a) age, (b) gender, (c) ethnic/racial group, (d) religion, (e) importance of religion, (f) highest level of education obtained, (g) military area of service, (h) age when enrolled into military service, (i) total years of military service and (j) highest military ranking (Appendix D). Overall, the use of mixed methods allowed for a more comprehensive perspective during data analysis.

Informed Consent, Risks and Benefits

Informed consent from the participants was obtained prior to administration of the Honoring Healthcare Choices CPR educational handout (Appendix I). Potential participants were informed that they were not required to complete the entire process and could choose to drop out of the process at any time. Potential participants were informed that no incentive, including monetary, were employed during this study. The informed consent document was kept separate from collected data in order to maintain anonymity. Return of the completed survey indicated willingness to participate in the study.

Risks associated with this scholarly project were considered minimal. Reviewing of an educational handout associated with CPR had the potential to initiate individual thoughts and stressors regarding this topic. If after reading the educational handout, the participant expressed further questions or concerns, they were referred to the staff at the nursing home for veterans in which they resided. It should be noted that wishes associated with CPR were discussed and documented with each individual upon admission to the nursing home and not completed during data collection. If participants wished to discuss or amend their existing code status, the researcher facilitated timely contact with the supervising nurse.

Evaluating and providing further recommendations for the Honoring Healthcare Choices CPR educational handout has numerous benefits for local veterans and the veteran population in its entirety. This process ensured that educational material regarding this critical topic would be presented in a manner that best meets the unique needs of this population. Further, this information can be applied at additional veteran facilities that utilize the Honoring Healthcare Choices CPR educational handout.

Additionally, data collection and evaluation regarding the veteran population in any topic area will aid healthcare providers in their ability to best meet the specific and unique needs of this population, thus positively impacting patient care.

Procedures

Prior to scholarly project implementation the usage of the Honoring Healthcare Choices CPR educational handout and associated surveys were reviewed with the Medical Director at the nursing home for veterans. After receiving IRB approval, the student investigator began data collection. Potential participants were approached in their living quarters at the veteran facility and provided with a brief verbal summary of the scholarly project. If interested, the necessary consent form was reviewed. The Honoring Healthcare Choices CPR educational handout was then distributed to participants for review. If required, the handout was read to veterans by the researcher. The adapted iDECIDE CPR Decision Aid Acceptability questionnaire with three additional qualitative questions was then distributed. Finally, a separate, short demographic survey was distributed. Assistance in reading and completing the surveys, due to physical limitations, was provided solely by the student investigator for consistency in data collection. Data collection occurred during the months of April and May of 2017. A project modification form was submitted to IRB due to a change in the scholarly project chair (Appendix J).

Data Analysis

A statistician was consulted for the scholarly project. R software was used for statistical analysis. Descriptive statistics including percent values were analyzed. An a priori criteria for success was established at 70% on the adapted iDECIDE CPR Decision

Aid Acceptability questionnaire (Frank et al., 2010). Qualitative questions were examined by the student investigator for recurring themes and patterns. Patient response data and associated demographics collected by the student investigator were placed on a spreadsheet and used by the student investigator and statistician for further research analysis. The data was reviewed for trends. Fisher's exact test of independence was used to analyze variables because it allowed the researcher to calculate exact probability of the chi-square statistic when, as in this scholarly project, the sample size was small (N=70). Survey identification numbers were used to link the distributed survey with associated demographic questions with no identifying materials linked to the collected surveys. All research materials and associated documents were kept in a locked filing cabinet seven years and then destroyed.

Chapter Four

Scholarly Project Summary

CPR educational tools are prevalent in ACP and shared decision making between providers and patients. However, tools developed specifically in the interest of veterans are lacking. This negatively impedes the ACP process among this population. ACP tools that meet specific population needs and are easy-to-use can result in a threefold higher rate of usage, and ultimately in appropriate documentation of patient values and wishes. Exclusion of effective educational tools coincides with one-time-only conversations contributing to an overall failure in the ACP process. The purpose of this DNP scholarly project was to evaluate the use of the Honoring Healthcare Choices CPR educational handout through administration of the iDECIDE CPR Decision Aid Acceptability questionnaire at a veterans home in the Midwest. The iDECIDE CPR Decision Aid Acceptability questionnaire has proven to be both a valid and reliable tool to assess CPR educational tools and was adapted for this scholarly project. The administration of the adapted iDECIDE questionnaire provided an opportunity to evaluate and offer further recommendations for the Honoring Healthcare Choices CPR educational handout used by a nursing home for veterans. Additionally, demographic data was collected to investigate trends specific to life experiences that are unique to the veteran population in relation to survey question responses.

Data Analysis

A convenience sample with N=70 was used for this research. A total of 10 explanatory variables related to demographic data were collected. To maintain confidentiality, categories with <10 subjects will not include specific data. The vast majority of subjects were White males whose highest level of education was high school.

The average age of subjects was 79.46 and the average age of enrollment into the military was 18.87. The average amount of years served in the military was 4.75 years. Specific numbers regarding gender and ethnicity will not be revealed in order to maintain confidentiality. Notable points within the demographic data included less than 10 participants identifying as female and less than 10 participants identifying as Native American. Also, 55.2% (*n* = 38) were enrolled in the army while less than 10 participants were enrolled in the Marine Corps. The majority of subjects identified religion was extremely important (See Tables 1 and 2) (See Figures 2, 3 and 4).

Table 1

Percentages and Numbers of Highest Education Level Obtained

Highest Education Obtained			
Elementary	High School	College	Post-Graduate
n<10	46.3% (n=33)	38.8% (n=27)	n<10

Note. To maintain confidentiality, categories with <10 subjects will not include specific data.

Table 2

Continuous Demographic Variables

Variable	Minimum	1st Quartile	Median	Mean(±SD)	3rd Quartile	Maximum
Age	50	73	81	79.46 (±10.97)	87	96
Enrollment Age	16	18	18	18.87 (±1.70)	20	25
Years Served	0.30	2	3	4.75 (±5.63)	4	26

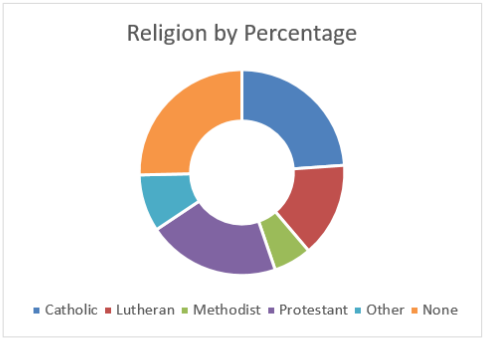

Figure 2. Religion by percentage.

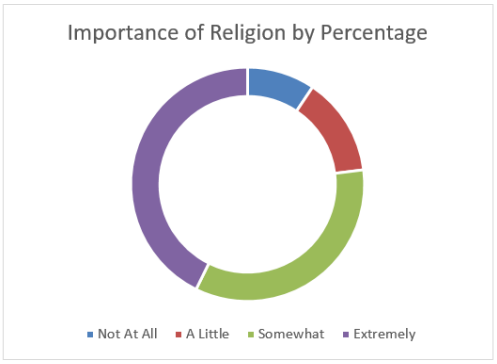

Figure 3. Importance of religion by percentage.

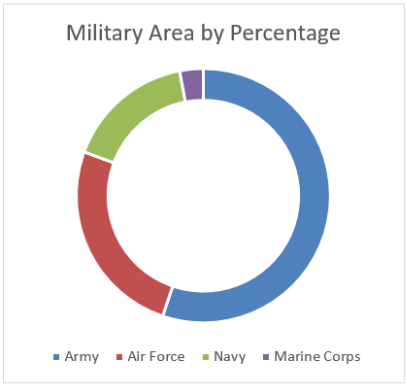

Figure 4. Military area by percentage.

Question one of the iDECIDE CPR Decision Aid Acceptability questionnaire asked if the participant read the entire educational handout. Of the 70 responses, 75.6% (n = 53) read the entire handout and 24.4% (n = 17) did not. The second question asked the participant if anyone else read the educational handout. The vast majority of subjects did not have anyone else read the handout. Less than 10 subjects required another individual to read the handout to them. Question three asked about the amount of information in the educational handout, with the optimal response defined as, "about the right amount". Of the 70 responses, 86.6% (n = 61) felt the educational handout had "about the right amount" of information. The fourth question addressed how balanced the participant felt that the handout presented the information, with the optimal response

defined as, “balanced”. A majority (n=59, 83.6%) of subjects felt that the educational handout presented balanced information. Question five asked the participant how clear the information was in the educational handout. Optimal responses were defined as, “everything was clear” and “most things were clear”. A majority (n=67, 95.6%) of subjects replied with optimal responses. The sixth question addressed how helpful the educational handout was in helping make decisions about CPR, with optimal responses defined as “very helpful” and “somewhat helpful”. Of the 70 responses, 77.6% (*n* = 54) found the handout optimal for helping make decisions about CPR. Question seven addressed how likely the participant would be to recommend this educational handout to others. The optimal responses were defined as “definitely recommend” and “probably recommend”. A majority (n=63, 89.5%) of subjects replied with optimal responses.

Questions 8-12 twelve used the same five point Likert scale with options ranging from poor, fair, good, very good and excellent for each question. Optimal responses were defined as excellent, very good or good. Question eight asked the participant to provide an overall rating of the educational handout. A majority (n=61, 86.6%) of subjects replied with optimal responses. The ninth question asked how well the educational handout addressed why CPR would occur, with 83.6% (*n* = 59) providing optimal responses. Question 10 asked the participant how well the educational handout addressed what CPR is, with 83.5% (*n* = 59) providing optimal responses. Question 11 asked how well the educational handout addressed survival from CPR. A majority (n=60, 85.1%) of subjects provided either excellent, very good or good responses. The 12th and final Likert survey question asked how well the educational handout addressed potential side effects from CPR, with 80.5% (*n* = 57) providing optimal responses. An a priori criteria

for success value of 70% on the adapted iDECIDE CPR Decision Aid Acceptability questionnaire was met for questions 8-12 (Frank et al., 2010) (see Table 3).

Less than 10 participants chose to partake in the qualitative questioning. However, several themes were noted among the gathered responses. In general, military experiences do have a direct impact on the decision to have CPR or not. Suggestions for improving the handout seemed to center around simplifying terminology and the addition of information about defibrillation. A formatting suggestion of providing visual separation of information within the handout was also given. In regards to whether the handout benefits veterans specifically, the majority of responses were positive with several subjects noting that the handout is beneficial for the general population (see Table 4).

Table 3

Percentages and Numbers of Responses to Survey Questions

Question 3: How would you rate the amount of information in the educational handout?

Much Less	A Little Less	**About Right**	A Little More	A Lot More
n<10	n<10	86.6% (n=61)	n<10	n<10

Question 4: How balanced was the educational handout's information about CPR?

Clearly Towards	Little Towards	**Balanced**	Little Against	Clearly Against
n<10	n<10	83.6% (n=59)	n<10	n<10

Question 5: How clear was the information in the educational handout?

Very Unclear	Mostly Unclear	**Mostly Clear**	**Everything Clear**
n<10	n<10	49.3% (n=34)	46.3% (n=33)

Question 6: How helpful was the educational handout in helping you make decisions about CPR?

Not Helpful	A Little Helpful	**Somewhat Helpful**	**Very Helpful**
n<10	13.4% (n=10)	35.8% (n=25)	41.8% (n=29)

Question 7: Would you recommend this educational handout to other people who are considering whether or not to have CPR?

Not Recommended	Probably Not Recommended	**Probably Recommended**	**Definitely Recommended**
n<10	n<10	35.8% (n=25)	53.7% (n=38)

Question 8: Overall, how would you rate the educational handout?

Poor	Fair	**Good**	**Very Good**	**Excellent**
n<10	n<10	28.4% (n=20)	40.3% (n=28)	17.9% (n=13)

Question 9: How well did this educational handout address why CPR would occur?

Poor	Fair	**Good**	**Very Good**	**Excellent**
n<10	n<10	32.8% (n=23)	26.9% (n=19)	23.9% (n=17)

Question 10: How well did this educational handout address what CPR is?

Poor	Fair	**Good**	**Very Good**	**Excellent**
n<10	n<10	31.3% (n=22)	35.8% (n=25)	16.4% (n=12)

Question 11: How well did this educational handout address survival from CPR?

Poor	Fair	**Good**	**Very Good**	**Excellent**
n<10	n<10	29.9% (n=22)	43.3% (n=30)	n<10

Question 12: How well did this educational handout address potential side effects from CPR?

Poor	Fair	**Good**	**Very Good**	**Excellent**
n<10	n<10	32.8% (n=23)	37.3% (n=27)	n<10

Note. To maintain confidentiality, categories with <10 subjects will not include specific data.

Table 4

Qualitative Responses

Question 10: Influence of military experiences on CPR decision
It may have been influential
Most definitely
This is a difficult question to answer
I would say it didn't
Yes I guess so
Yes, because I saw CPR all the time
Question 11: Suggestions to improve the educational handout
It's a good handout
Make sure you read it
Add in more information about what happens when the heart is shocked
Could be simpler to understand
Break up information sections with lines
Question 12: Thoughts on handout meeting the needs of the veteran population
I would say fairly good
I would figure it meets the needs of any veteran or any person in general
I hope everyone can use this
I would say yes
No, not enough information
I think it meets the needs for everyone
I have no idea, everyone is different
I think it's good for anyone

Fisher's exact test of independence is based on Robert Fisher's idea that allows for the evaluation of evidence within the context of research (Field, 2013). This test provides a method for calculating exact probability of the chi-square statistic when, as in this scholarly project, the sample size is small ($N = 70$) (Field, 2013). The development of a fixed variable row and column table allows the determination of whether the proportions for one variable are different among the values of the other variable (Field, 2013). The variables selected included both individual and a summation of questions eight through twelve from the iDECIDE CPR Decision Aid Acceptability questionnaire in relation to three selected demographic variable including religion, importance of

religion and military branch. These three demographic variables were selected because they represented the top three areas of variation in survey responses (See Table 5).

Table 5

Fisher's Exact Test of Independence

Demographic Variable	Question 8	Question 9	Question 10	Question 11	Question 12	Total (8-12)
Religion	0.4738	0.9815	0.4328	0.2884	0.7001	0.2159
Importance of Religion	0.2044	0.3658	0.7726	0.5182	0.6812	**0.0120**
Military Branch	0.2129	0.1919	0.1449	0.1184	0.0765	0.8966

Note. p value less than 0.05 is bolded.

A p-value of interest ($p = 0.0120$) is seen in the summation of questions 8-12 in relation to importance of religion. This indicates strong evidence that the proportions of positive responses is not equal across the categories of importance of religion. Because the Fisher's test does not tell us what categories differ, but rather that a difference exists, further manipulation of the data was necessary and showed that a large difference was seen in the middle two categories ("a little" and "somewhat" responses) in comparison to the "not at all" and "extremely" categories (See Figure 5).

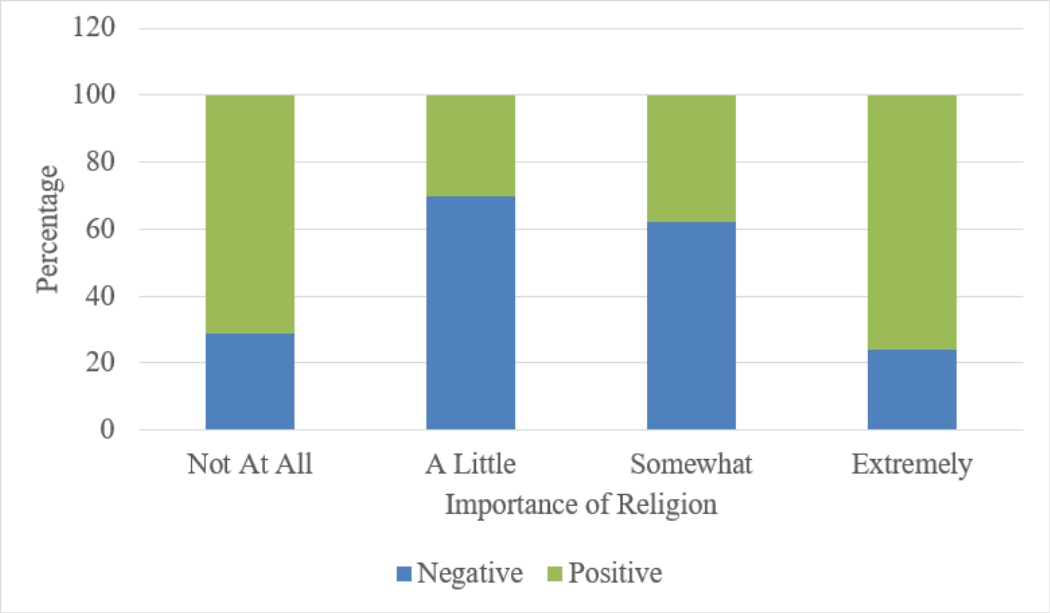

Figure 5. Summation of responses to questions 8-12 and importance of religion.

Initially, a logistic model and contingency table analysis were intended to be used for data analysis of survey responses in relation to demographic variables. However, the structure of the data including the small sample size (N = 70) and similarities in demographics (i.e. ethnicity and gender) did not make the data suitable for model fitting. Inability to further support model fitting is seen in Table 5 in which only two tests represent p-values of less than 0.10. The lack of variability among the data, in combination with small sample size when model fitting, can easily lead to misinterpreted or inaccurate conclusions.

Strengths and Limitations

The overall purpose of evaluating the Honoring Healthcare Choice CPR educational handout was achieved and results revealed a positive response to the handout. This finding provides direct support in the value of using this handout at nursing home

for veterans to supplement CPR conversations during the ACP and shared decision making process. It is reasonable to make inferences from this study to direct future studies for this local population. Additionally, due to the validity and reliability of the iDECIDE CPR Decision Aid Acceptability questionnaire, this study could be easily replicated. Limited information and research regarding CPR education, ACP, and shared decision making among the veteran population exists. Information from this scholarly project adds to the knowledge base of the aforementioned topic areas.

Several limitations were noted in this scholarly project. The minimal sample size of 107 was not obtained due to numerous factors. The largest factor influencing sample size was the inability of some veterans at the nursing home to cognitively participant in the survey process. Initially, 25 veterans of the facility were excluded because they reside in the facility's memory care unit. However, this did not take into account additional veterans who may reside on the sub-acute care floors who have existing health issues that impede their cognitive ability to complete the survey.

Due to the small sample size and similarity among demographic responses, extending inferences beyond this sample is not warranted because it is not likely representative of the general population. Further, extensive exploratory data analysis was conducted to investigate correlation between demographic trends and survey responses, which proved inconclusive. A larger sample size would have allowed for results that were both valid, reliable, and generalizable.

Future Studies

Future studies could benefit from the implementation of a Mini Mental State Exam in the inclusion criteria. This would provide more specific qualifications for

inclusion in the study. The small sample size with similarities among demographic data does not allow for an accurate representation of the general veteran population. Implementing this scholarly project at multiple veteran facilities would reveal demographic trends that could directly influence care provided to the veteran population. Additionally, investigating the role of religion in a veteran's decision regarding CPR could further guide educational decision tools and the shared decision making process.

Recommendations and Conclusions

CPR educational tools that are designed to meet specific needs of veterans are crucial to the successful implementation of ACP and shared decision making. The implementation of effective and appropriate educational tools to inform veterans regarding CPR increases the usage of these tools and coincides with the documentation of patient values and wishes for end of life preferences. The results from this study reveal that the Honoring Healthcare Choice CPR handout is viewed by participating veterans as being appropriate and valuable. Implementing the regular usage of this CPR educational handout has the potential to increase patient knowledge, supplement provider and patient communication, and aid in the shared decision making process regarding end of life care wishes, values and preferences.

The implementation of this study with a larger sample size would reveal information that could influence the care provided to veterans. Recognition and acknowledgement of specific demographic trends can help further facilitate the development of CPR educational tools that best meet the needs of veterans in the ACP and shared decision making process. Further studies centered around the specific needs of veterans have the potential to enhance patient autonomy, reduce healthcare costs, and

increase patient satisfaction for a population that placed the needs of others before the needs of themselves.

References

Au, D. H., Udris, E. M., Engelberg, R. A., Diehr, P. H., Bryson, C. L., Reinke, L. F., & Curtis, J. R. (2012). A randomized trial to improve communication about end-of-life care among patients with COPD. *Chest*, *141*(3), 726–735. https://doi.org/10.1378/chest.11-0362

Charles, C., Whelan, T., & Gafni, A. (1999). What do we mean by partnership in making decisions about treatment? *BMJ (Clinical Research Ed.)*, *319*(7212), 780–782. https://doi.org/10.1136/bmj.319.7212.780

Detering, K. M., Hancock, A. D., Reade, M. C., & Silvester, W. (2010). The impact of advance care planning on end of life care in elderly patients: Randomised controlled trial. *BMJ*, *340*, 1–9. https://doi.org/10.1136/bmj.c1345

Downey, L., Au, D. H., Curtis, J. R., & Engelberg, R. A. (2013). Life-sustaining treatment preferences: Matches and mismatches between patients' preferences and clinicians' perceptions. *Journal of Pain and Symptom Management*, *46*(1), 9–19. https://doi.org/10.1016/j.jpainsymman.2012.07.002

Etingen, B., Miskevics, S., & LaVela, S. L. (2016). Assessing the associations of patient-reported perceptions of patient-centered care as supplemental measures of health care quality in VA. *Journal of General Internal Medicine*, *31*(Suppl. 1), S10–S20. https://doi.org/10.1007/s11606-015-3557-2

Fallowfield, L., Jenkins, V., Farewell, V., Saul, J., Duffy, A., & Eves, R. (2002). Efficacy of a Cancer Research UK communication skills training model for oncologists: A randomised controlled trial. *Lancet*, *359*(9307), 650–656. https://doi.org/10.1016/S0140-6736(02)07810-8

Field, A. (2013). *Discovering statistics using IBM SPSS statistics: And sex and drugs and rock "n" roll* (4th ed.). London, England: Sage Publications.

Fischer, G. S., Tulsky, J. A., Rose, M. R., Siminoff, L. A., & Arnold, R. M. (1988). Patient knowledge and physician predictions of treatment preferences after discussion of advance directives. *Journal of General Internal Medicine, 13*(7), 447–454. https://doi.org/10.1046/j.1525-1497.1998.00133.x

Frank, C., Pichora, D., Suurdt, J., & Heyland, D. (2010). Development and use of a decision aid for communication with hospitalized patients about cardiopulmonary resuscitation preference. *Patient Education and Counseling, 79*(1), 130–133. https://doi.org/10.1016/j.pec.2009.08.002

Gibson, B., Butler, J., Doyon, K., Ellington, L., Bray, B. E., & Zeng, Q. (2017). Veterans like me: Formative evaluation of a patient decision aid design. *Journal of Biomedical Informatics, 71*(Suppl.), S46–S52. https://doi.org /10.1016/j.jbi.2016.09.007

Hogan, C., Lunney, J., Gabel, J., & Lynn, J. (2001). Medicare beneficiaries' costs of care in the last year of life. *Health Affairs, 20*(4), 188–195. https://doi.org /10.1377/hlthaff.20.4.188

Institute of Medicine. (2015). *Dying in America: Improving quality and honoring individual preferences near the end of life.* https://doi.org/10.17226/18748

Mahaney-Price, A. F., Hilgeman, M. M., Davis, L. L., McNeal, S. F., Conner, C. M., & Allen, R. S. (2014). Living will status and desire for living will help among rural Alabama veterans. *Research in Nursing & Health, 37*(5), 379–390. https://doi.org /10.1002/nur.21617

Menon, A. S., Campbell, D., Ruskin, P., & Hebel, J. R. (2000). Depression, hopelessness, and the desire for life-saving treatments among elderly medically ill veterans. *American Journal of Geriatric Psychiatry*, *8*(4), 333–342. https://doi.org /10.1097/00019442-200011000-00010

O'Connor, A. M. (2006). *Ottawa decision support framework to address decisional conflict*. Retrieved from Ottawa Hospital Research Institute website: https://decisionaid.ohri.ca/docs/develop/ODSF.pdf

Ottawa Hospital Research Institute. (2017). Ottawa decision support framework. Retrieved December 5, 2017, from https://decisionaid.ohri.ca/odsf.html

Pearlman, R. A., Starks, H., Cain, K. C., & Cole, W. G. (2005). Improvements in advance care planning in the veterans affairs system: Results of a multifaceted intervention. *Archives of Internal Medicine*, *165*(6), 667–674. https://doi.org /10.1001/archinte.165.6.667

Rodríguez, V., Andrade, A. D., García-Retamero, R., Anam, R., Rodríguez, R., Lisigurski, M., … Ruiz, J. G. (2013). Health literacy, numeracy, and graphical literacy among veterans in primary care and their effect on shared decision making and trust in physicians. *Journal of Health Communication*, *18*(Suppl. 1), 273–289. https://doi.org/10.1080/10810730.2013.829137

Stacey, D., Légaré, F., Lewis, K., Barry, M. J., Bennett, C. L., Eden, K. B., … Trevena, L. (2017). Decision aids for people facing health treatment or screening decisions. *Cochrane Database of Systematic Reviews*, (4). https://doi.org /10.1002/14651858.CD001431.pub5

Sudore, R. L., Boscardin, J., Feuz, M. A., McMahan, R. D., Katen, M. T., & Barnes, D. E. (2017). Effect & PREPARE: Effect of the PREPARE Website vs an Easy-to-Read Advance Directive on advance care planning documentation and engagement among veterans: A randomized clinical trial. *JAMA Internal Medicine*, *177*(8), 1102–1109. https://doi.org/10.1001/jamainternmed.2017.1607

Sudore, R. L., & Fried, T. R. (2010). Redefining the "planning" in advance care planning: Preparing for end-of-life decision making. *Annals of Internal Medicine*, *153*(4), 256–261. https://doi.org/10.7326/0003-4819-153-4-201008170-00008

Sudore, R., Le, G. M., McMahan, R., Feuz, M., Katen, M., & Barnes, D. E. (2015). The advance care planning PREPARE study among older veterans with serious and chronic illness: Study protocol for a randomized controlled trial. *Trials*, *16*, 1–16. https://doi.org/10.1186/s13063-015-1055-9

Terry, A. J. (2015). *Clinical research for the doctor of nursing practice* (2nd ed.). Burlington, MA: Jones & Bartlett Learning.

U.S. Department of Veterans Affairs. (2015). About VA. Retrieved November 1, 2016, from https://www.va.gov/about_va/mission.asp

U.S. Department of Veterans Affairs. (2017). Advance care planning- Geriatrics and extended care. Retrieved from https://www.va.gov/GERIATRICS/Guide/LongTermCare/Advance_Care_Planning.asp

U.S. Department of Veterans Affairs. (2014). *Blueprint for excellence* (Fact sheet). Retrieved from https://www.whiteriver.va.gov/files/blueprintforexcellence_factsheet.pdf

Wright, A. A., Zhang, B., Ray, A., Mack, J. W., Trice, E., Balboni, T., … Prigerson, H. G. (2008). Associations between end-of-life discussions, patient mental health, medical care near death, and caregiver bereavement adjustment. *JAMA, 300*(14), 1665–1673. https://doi.org/10.1001/jama.300.14.1665

Yamada, R., Galecki, A. T., Goold, S. D., & Hogikyan, R. V. (1999). A multimedia intervention on cardiopulmonary resuscitation and advance directives. *Journal of General Internal Medicine, 14*(9), 559–563. https://doi.org/10.1046/j.1525-1497.1999.11208.x

Appendix A

Ottawa Decision Support Framework: Permission for Use Letter

Hello,

My name is Rhian Dalgord. I am a current Doctor of Nursing Practice candidate at Northern Michigan University. I am working on my scholarly project titled, Advance Care Planning: Cardiopulmonary Resuscitation Education and the Veteran Population. I have found great value in the Ottawa Decision Support Framework and am seeking permission with proper citation to use the image of the Ottawa Decision Support Framework within my project. Please let me know if you need any additional information at this time and thank you for taking the time out of your day to respond to this inquiry.

Best, Rhian Dalgord

--

OHRI, decisionaid
The image is available on our website and as such you have open access to using it. We have also published an image in a peer-reviewed manuscript on integration of decision support in curriculum.

Dawn

Dawn Stacey PhD

Scientific Director, Patient Decision Aids Research Group

Senior Scientist, Clinical Epidemiology Program – General Campus (Room 1280)

Ottawa Hospital Research Institute\

613-737-8899 ext 73817

dstacey@ohri.ca

https://decisionaid.ohri.ca

https://ktcanada.ohri.ca/costars

Appendix B

Exterior of The Honoring Healthcare Choices CPR educational handout

Making Healthcare Choices:

Cardiopulmonary Resuscitation (CPR)

July 2016

For use with Honoring Healthcare Choices implementation only.

Interior of The Honoring Healthcare Choices CPR educational handout

This brochure will provide answers to some questions about cardio pulmonary resuscitation (CPR), options for its use, and other facts to consider when making a decision about CPR.

Common questions you may ask when making these choices for yourself or someone else that is very ill include:

- Will I or my loved one live longer after CPR is performed?
- Will CPR help enough to outweigh risks and discomfort?
- Will CPR allow for treatment that is likely to cure the illness?

What is CPR?
CPR is used to attempt to restore the proper functioning of the heart and breathing once these have stopped.

CPR may include:

- Breathing into your mouth and pressing on your chest
- A tube placed in your throat to help you breathe
- Electrical shock and medications to try to start your heart

How successful is CPR?
CPR works best if:

- You are healthy
- It can be performed within a few minutes of when your heart or lungs stop working
- You are already in a healthcare setting

CPR does not work as well if you:

- Have severe or chronic health problems
- Have an illness that cannot be cured

What else can happen with CPR?
If CPR is successful:

- You may need to be on a breathing machine
- You may have damage to your ribs, liver, bruising of the chest or brain damage

If you want to try CPR
If you want to try CPR, you should talk about what results you would expect. What are your goals?

If you choose to not attempt CPR, you will still receive medical care and treatment.

Whatever the decision, it is important to talk to your healthcare provider about putting your desired outcomes and wishes in writing before a crisis occurs.

Making the decision about CPR can be very difficult for a person's loved ones. Having a conversation about if you would choose to have CPR before a crisis occurs is important in making sure your wishes are honored.

Appendix C

Adapted iDECIDE CPR Decision Aid Acceptability questionnaire

What did you think about the Honoring Healthcare Choices cardiopulmonary resuscitation educational handout?

Please check one answer for each question.

1. Did you read the entire educational handout?
   - ❑ Yes
   - ❑ No

2. Did anyone else (such as family or friends) read the educational handout?
   - ❑ Yes What is their relation to you?: _____
   - ❑ No

3. How would you rate the amount of information in the educational handout?
   - ❑ Much less than I needed
   - ❑ A little less than I needed
   - ❑ About the right amount
   - ❑ A little more than I needed
   - ❑ A lot more than I needed

4. How balanced was the educational handout's information about CPR?
   - ❑ Clearly slanted towards **having** CPR
   - ❑ A little slanted towards **having** CPR
   - ❑ Completely balanced
   - ❑ A little slanted towards **not** having CPR
   - ❑ Clearly slanted towards **not** having CPR

5. How clear was the information in the educational handout?
   - ❑ Everything was clear
   - ❑ Most things were clear
   - ❑ Some things were clear
   - ❑ Many things were unclear

6. How helpful was the educational handout in helping you make decisions about CPR?
   - ❑ Very helpful
   - ❑ Somewhat helpful
   - ❑ A little helpful
   - ❑ Not helpful

7. Would you recommend this educational handout to other people who are considering whether or not to have CPR?

- ❑ I would definitely recommend it
- ❑ I would probably recommend it
- ❑ I would probably not recommend it
- ❑ I would definitely not recommend

8. Overall, how would you rate the educational handout?
   - ❑ Poor
   - ❑ Fair
   - ❑ Good
   - ❑ Very good
   - ❑ Excellent

9. How well did this educational handout address why CPR would occur?
   - ❑ Poor
   - ❑ Fair
   - ❑ Good
   - ❑ Very good
   - ❑ Excellent

10. How well did this educational handout address what CPR is?
   - ❑ Poor
   - ❑ Fair
   - ❑ Good
   - ❑ Very good
   - ❑ Excellent

11. How well did this educational handout address survival from CPR?
   - ❑ Poor
   - ❑ Fair
   - ❑ Good
   - ❑ Very good
   - ❑ Excellent

12. How well did this educational handout address potential side effects from CPR?
   - ❑ Poor
   - ❑ Fair
   - ❑ Good
   - ❑ Very good
   - ❑ Excellent

13. Do you feel your experiences in military service influence your decision to choose/not choose CPR? Please explain.

14. Based on your experience reading the educational handout, what suggestions do you have to improve the handout?

15. Based on your experience reading the educational handout, do you feel it meets the needs of the veteran population?

Appendix D

Demographic Survey

Age:

Gender:

Ethnic/Racial Group:

Religion:

Importance of Religion:

- ❑ Extremely
- ❑ Somewhat
- ❑ A little
- ❑ Not at all

Highest Education Obtained?

- ❑ Elementary
- ❑ High School
- ❑ College
- ❑ Post-Graduate

Military Area

- ❑ Army
- ❑ Marine Corps
- ❑ Navy
- ❑ Coast Guard
- ❑ Air Force

Age when enrolled in Military Service:

Years of Military Service:

Highest Military Ranking:

Appendix E

Institutional Review Board Approval

Memorandum

TO: Rhian Smith
Nursing Department

CC: Nanci Gasiewicz
Nursing Department

FROM: Dr. Robert Winn
Interim Dean of Arts and Sciences/IRB Administrator

DATE: March 3, 2017

SUBJECT: IRB Proposal HS17-829
"Advance Care Planning: Cardiopulmonary Resuscitation Education and the Veteran Population"
IRB Approval Dates: 3/3/2017 - 3/3/2018
Proposed Project Dates: 3/3/2017 - 12/1/2017

Your proposal "Advance Care Planning: Cardiopulmonary Resuscitation Education and the Veteran Population"" has been approved under the administrative review process. Please include your proposal number (HS17-829) on all research materials and on any correspondence regarding this project.

Any changes or revisions to your approved research plan must be approved by the Institutional Review Board (IRB) prior to implementation.

If you do not complete your project within 12 months from the date of your approval notification, you must submit a Project Renewal Form for Research Involving Human Subjects. You may apply for a one-year project renewal up to four times.

All forms can be found at the NMU Grants and Research website:
http://www. nmu. edu/grantsandresearch/node/102

Appendix F

Permission regarding the usage of Honoring Healthcare Choices CPR educational handout email correspondence

From: Kate LaBeau [mailto:KLaBeau@uphp. com]
Sent: Wednesday, August 3, 2016 11:14 AM
To: rhsmith@nmu. edu
Subject: RE: fact sheet

Hi Rhian-
It is fine with me for sure if you want to use that CPR fact sheet. I think it would be helpful in many ways actually. There are other groups I work with downstate that are using the fact sheets we made up here and branded with HHCMI. All folks might find the results interesting and there may even be groups willing to help you with future data collection of surveys if applicable and warranted.
Kate

Kate LaBeau
Advance Care Planning Program Manager
Upper Peninsula Health Plan
228 W. Washington Street
Marquette, MI 49855
P:*906-225-1174*
F:906-225-1087
KLaBeau@uphp. com

Appendix G

Permission regarding adaptation of the iDECIDE CPR Decision Aid Acceptability questionnaire email correspondence

Hi Daren,

I just received a phone call from Rhian Smith (cc'd) regarding the CPR pamphlet acceptability questionnaire used in the following manuscript:

Frank C, Suurdt JS, **Heyland DK**. Development and use of a decision aid for communication with hospitalized patients about cardiopulmonary resuscitation preference. Patient Educ Couns 2010; Apr;79(1):130-3.

She will be doing a similar study testing their own CPR pamphlet and was wondering if she could use our acceptability questionnaire. I'm not sure what the original questionnaire looked like as it was before my time. I assume the CPR video acceptability questionnaire currently being used by iDECIDE (and previously by CPR-VDA) may have been based on it the original questionnaire mentioned in the manuscript. Could you confirm whether they are the same and communicate with Rhian regarding permission to use the questionnaire.

I have also cc'd Marilyn since they are currently using the questionnaire and may have additional input regarding the questionnaire.

Thanks,

Shawna Froese
Data Management
Clinical Evaluation Research Unit
Tel: 613-549-6666 ext 4679
Fax: 613-548-2428

Daren Heyland <dkh2@queensu. ca> 10/31/16 **Reply**

to Shawna, me, Marilyn

Hi

Rhian, I would follow up iwht Marilyn, cc'd here, who can share our current assessment questions that we are using for our video tool, that you can apply to your paper based tool.
Cheers
Daren

Appendix H

Institutional Review Board Approval: Nursing Home in Midwest

RICK SNYDER
GOVERNOR

[redacted]

JAMES ROBERT REDFORD
DIRECTOR

September 11, 2017

Kristina Lynch, RN, MSN
Director of Nursing
[redacted]

To those concerned;

Prior to initiating her research project, I was contacted by Rhian Dalgord (Smith) requesting approval to conduct research involving the participation of residents of [redacted]. This request, as well as her research proposal, were reviewed by the administration of the Home and were approved pending approval by the Institutional Review Board at NMU. Once this approval was obtained and provided to the Home it satisfied the requirements of the Home to conduct her research and she was given permission to proceed. If you have any further questions please feel free to contact me. Thank you.

Sincerely,

Kristina Lynch, RN MSN

Kristina M. Lynch

[redacted]

Appendix I

Scholarly Project Consent Form

IRB Number: HS17-829

Date: February 20, 2017

Rhian Smith BSN, RN
Northern Michigan University
1401 Presque Isle Ave
Marquette, MI
49837

Dear Participant:

We are writing to invite you to participate in a research study. The purpose of the study is to evaluate and provide further recommendations for the Honoring Healthcare Choices cardiopulmonary resuscitation educational handout used by an advanced care planning company at [redacted]

We are inviting you to be in this study because you are a veteran of the United State Military residing at [redacted]. Approximately 100 people will take part in this study at Northern Michigan University.

If you agree to participate, we would like you to read the provided Honoring Healthcare Choices cardiopulmonary resuscitation educational handout and then complete a Likert-type survey and demographic survey. If any assistance in reading and completing the surveys is required due to physical limitations, the student investigator will provide this. The entirety of this process will take approximately 15-30 minutes. If you choose not to participate then please verbally inform the student investigator. If you decline participation, you will not be approached again regarding this study. You are free at any time to decline further participation in the study or not answer any questions on the Likert-type or demographic survey.

Your part in this study is anonymous. That means that your answers to all questions are private. No one else can know if you participated in this study and no one else can find out what your answers were. Scientific reports will be based on group data and will not identify you or any individual as being in this project.

There are no known risks from being in this study, and you will not benefit personally. However, we hope that others may benefit in the future from what we learn as a result of this study.

Taking part in this research study is completely voluntary. If you decide not to be in this study, or if you stop participating at any time, you won't be penalized or lose any benefits for which you otherwise qualify.

If you have any further questions regarding your rights as a participant in a research project you may contact Dr. Robert Winn of the Human Subjects Research Review Committee of Northern Michigan University (906-227-2300) rwinn@nmu. edu. Any questions you have regarding the nature of this research project will be answered by the principal researcher who can be contacted as follows: Rhian Smith (920-246-8562) rhsmith@nmu. edu.

I have read the above "Informed Consent Statement. " The nature, risks, demands, and benefits of the project have been explained to me. I understand that I may ask questions and that I am free to withdraw from the project at any time without incurring ill will or negative consequences. I also understand that this informed consent document will be kept separate from the data collected in this project to maintain anonymity (confidentiality). Access to this document is restricted to the principle investigators. This survey is anonymous. If you choose to participate, do not write your name on the questionnaire. No one will be able to identify you. No one will know whether you participated in this study.

Thank you very much for your consideration. Return of a completed survey indicates willingness to participate in this study.

Sincerely,
Rhian Smith
Advance Care Planning: Cardiopulmonary Resuscitation Education and the Veteran Population

Appendix J

Institutional Review Board Approval: Scholarly project Modification Form

Project Modification Form for Research Involving Human Subjects
NMU Institutional Review Board (IRB)

NORTHERN MICHIGAN UNIVERSITY

Submission of this Project Renewal Form will be conducted electronically according to the following procedure:

1. After completing this form, the principal investigator will forward the form to the Department Head for approval.
2. If the Department Head approves the project, s/he will forward the application electronically to the administrative assistant to the IRB (jantavlo@nmu.edu) and the IRB chair (dereande@nmu.edu). Please copy the principal investigator on the e-mail.

Submission of this application signifies that you have read the NMU IRB Policy Manual and agree to adhere to the procedures and policies explained therein. If any unanticipated problems arise involving human subjects, you must immediately notify the IRB chair (dereande@nmu.edu) and NMU's IRB administrator (rwinn@nmu.edu).

Human Subject (HS) Project Number: **HS17-829**

Principal Investigator: **Rhian Dalgord (Smith)** Department: **Nursing** E-mail: **rhsmith@nmu.edu**

Co-Investigator: **Anne Stein** Department: **Nursing** E-mail: **anstein@nmu.edu**

Co-Investigator: Department: E-mail:

Project Title: **"Advance Care Planning: Cardiopulmonary Resuscitation Education and the Veteran Population"**

Funding Agency (if applicable): **NA**

YOU ARE REQUIRED TO PROVIDE THE FOLLOWING INFORMATION AT THIS TIME:

1. Indicate the number subjects that participated in the study since the last reporting period: **70 participants completed the review of the Honoring Healthcare Choices cardiopulmonary resuscitation education handout, the adapted iDECIDE CPR Decision Aid Acceptability Questionnaire with three additional qualitative questions and associated demographic data survey.**
2. Describe any unanticipated problems involving risks to the subject(s) or others, if applicable

There were no unanticipated problems involving risks to the subjects or others.

3. Identify numbers and reasons for withdrawal of subjects from research, if applicable
   No subjects withdrew from research.

4. List any complaints about the research, if applicable
   No complaints were shared during the research collection process.

5. Summarize any recent literature, findings, or other relevant information about risks associated with the research, if applicable
   Risk associated with this project were considered minimal. Reviewing of an educational handout associated with cardiopulmonary resuscitation had the potential initiate individual thoughts and stressors regarding this topic. If after reading the educational handout, the participant expressed further questions or concerns this was communicated to the staff at [redacted]. Further, it should be noted that wishes associated with cardiopulmonary resuscitation were discussed and documented with each individual upon admission to D.J. Jacobetti Home for Veterans. If participants wished to discuss or amend their existing code status, the researcher facilitated timely contact with the supervising nurse.

6. Please explain in detail the modifications you are proposing. Include a revised version of your protocol and/or consent form as an appendix to this document.
   Modification for the project is in relation to the supervising faculty chair. Faculty chairs have been changed due to the impending retirement of Nanci Gasiewicz. The new faculty chair is Anne Stein (See completed CITI modules below). No additional modifications are being requested due to the completion of data collection during the Summer of 2017. No revisions to data collection protocol and/or consent forms have been made.

   Anne Stein CITI Modules
   Belmont Report and CITI Course Introduction (ID: 1127)
   History and Ethical Principles - SBE (ID: 490)
   Defining Research with Human Subjects - SBE (ID: 491)
   The Federal Regulations - SBE (ID: 502)
   Assessing Risk - SBE (ID: 503)
   Informed Consent - SBE (ID: 504)
   Privacy and Confidentiality - SBE (ID: 505)
   Populations in Research Requiring Additional Considerations and/or Protections (ID: 16680)
   Research and HIPAA Privacy Protections (ID: 14)